System Memory Module

IP Version: v2.5.0

Release Notes

FPGA-RN-02065-1.3

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1. Introduction

This document contains the Release Notes for the System Memory Module. For specific details about the IP, refer to the following:

- System Memory Module User Guide (FPGA-IPUG-02073)

System Memory Module v2.5.0

Software	Software Version	Summary of Changes
Lattice Propel	2025.2	• Added the AXI4 atomic access feature. • Added support for MachXO4 devices.

System Memory Module v2.4.0

Software	Software Version	Summary of Changes
Lattice Propel	2025.1	• Added AXI interface support for ECP5 devices. • Added support for 64-bit data width on the AXI interface.

System Memory Module v2.3.1

Software	Software Version	Summary of Changes
Lattice Propel	2024.2.1	Fixed the Memory Address Depth parameter in the graphical user-interface (GUI).

System Memory Module Earlier Versions

IP Version	Summary of Changes
2.3.1	• Fixed memory address depth parameter in graphical user-Interface.
2.3.0	• Added LN2-CT support. • Enhancements with AXI4 performance. • Disabled output register for AXI4.
2.2.0	• Added ECP5 support and other enhancements.
2.1.0	• Support Read Pipeline for timing enhancement.
2.0.0	• Added AXI4 Interface support.
1.1.2	• Support for LAV-AT devices.
1.1.1	• Support for 208 EBRs in CertusPro-NX devices.
1.1.0	• Added support for up 7 LRAMs in CertusPro-NX devices.
1.0.4	• Support for MachXO2, MachXO3L and improved timing for LRAM implementations.
1.0.3	• Support for Mach-NX.
1.0.2	• Support for CertusPro-NX.
1.0.1	• Support for Crosslink-NX, Certus-NX.
1.0.0	• Initial release.

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References

- System Memory Module User Guide (FPGA-IPUG-02073)
- iCE40 UltraPlus web page
- ECP5 / ECP5-5G web page
- CrossLink-NX web page
- Certus-NX web page
- Certus-N2 web page
- CertusPro-NX web page
- Mach-NX web page
- MachXO2 web page
- MachXO3 web page
- MachXO3D web page
- MachXO4 web page
- MachXO5-NX web page
- Avant-E web page
- Avant-G web page
- Avant-X web page
- System Memory Module IP Core web page
- Lattice Radiant Software web page
- Lattice Propel Design Environment web page
- Lattice Diamond Software web page
- Lattice Insights for Lattice Semiconductor training courses and learning plans

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